



Control Number: 53403



Item Number: 86

**PROJECT NO. 53403**

**REVIEW OF CHAPTER §25.101  
CERTIFICATION CRITERIA**

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**PUBLIC UTILITY COMMISSION**

**OF TEXAS**

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**ORDER ADOPTING AMENDMENTS TO 16 TAC §25.101  
AS APPROVED AT THE NOVEMBER 30, 2022 OPEN MEETING**

The Public Utility Commission of Texas (commission) adopts amendments to 16 Texas Administrative Code (TAC) §25.101, relating to *Certification Criteria*. The commission adopts this rule with changes to the proposed text as published in the September 9, 2022 issue of the *Texas Register* (47 TexReg 5386). The amended rule will be republished. These amendments will implement changes made to Public Utility Regulatory Act (PURA) §37.052, §37.056 and §39.159 as revised by Senate Bill (SB) 1281, enacted by the 87th Texas Legislature, Regular Session. Specifically, these rule amendments will establish a congestion cost savings test (CCST) for evaluating economic transmission projects; require the commission to consider historical load, forecasted load growth, and additional load seeking interconnection when evaluating the need for additional Electric Reliability Council of Texas (ERCOT) reliability transmission projects; provide exemptions to the certificate of convenience and necessity (CCN) requirements for certain transmission projects; and require ERCOT to conduct a biennial assessment of the ERCOT power grid's reliability and resiliency in extreme weather scenarios. The amended rule will also let the commission consider the resiliency benefits of a proposed transmission project, as determined by the new biennial assessment conducted by ERCOT, when determining whether to approve the project.

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Additionally, the rule will also implement amendments to PURA §37.058 as revised by House Bill (HB) 1510 enacted by the 87th Texas Legislature, Regular Session. Specifically, these amendments clarify that an electric utility operating outside of ERCOT may, but is not required to, obtain a CCN to own or operate a generation facility with a capacity of 10 megawatts or less.

The commission received comments on the proposed rule from Representative Drew Darby, Chairman Will Metcalf, Chairman Kelly Hancock, Advanced Power Alliance and American Clean Power Association (APA/ACPA), AEP Texas Inc. and Electric Transmission Texas, LLC (AEP/ETT), Apex Clean Energy and Cypress Creek Renewables (ACE/CCR), Calpine Corporation (Calpine), CenterPoint Energy Houston Electric, LLC (CenterPoint), Conservative Texans for Energy Innovation (CTEI), Entergy Texas, Inc. (ETI), Grid United, LLC, LCRA Transmission Services Corporation (LCRA), Lone Star Transmission, LLC (Lone Star), NextEra Energy Resources, LLC (NextEra), Office of Public Utility Counsel (OPUC), Oncor Electric Delivery Company, LLC (Oncor), Sharyland Utilities, LLC (Sharyland), Sierra Club, Solar Energy Industries Association and Texas Solar Power Association (SEIA/TSPA), Southwestern Electric Power Company (SWEPCO), Steering Committee of Cities Served by Oncor (OCSC), Texas Advanced Energy Business Alliance (TAEBA), Texas Competitive Power Advocates (TCPA), Texas Consumer Association and Alison Silverstein Consulting (TCA/ASC), Texas Electric Cooperatives, Inc. (TEC), Texas Industrial Energy Consumers (TIEC), Texas-New Mexico Power Company (TNMP), Texas Public Power Association (TPPA), and Wind Energy Transmission Texas, LLC (WETT).

No party requested a hearing for this rulemaking.

***Transmission project evaluation***

This order refers to multiple transmission planning evaluation tests. Each of these tests can be used to evaluate the need for a proposed transmission project. A proposed project is classified as either a reliability project or an economic project. A reliability project is a transmission project that must be built in order to attain or maintain compliance with state or federal reliability standards. An economic project is a transmission project that is intended to provide some form of economic value.

Broadly speaking, an economic project can be evaluated using either a consumer benefit test or a societal benefit test. A consumer benefit test attempts to measure how an economic project would affect the *cost of electricity for the consumer*. This order discusses two different methods to measure costs paid by the consumer. The first of these methods is a generator revenue reduction test. This test was previously used in the ERCOT region to evaluate economic transmission projects but has been retired. The second method to measure consumer benefit is a congestion cost savings test. This is a new test required by SB1281 and has not been employed in the ERCOT region to date. ERCOT will develop a congestion cost savings test based on the parameters of §25.101, as amended by this order.

Societal benefit tests are a second broad category of tests used to evaluate economic projects. These tests measure *the economic benefit to society overall*, rather than focusing specifically on the consumer. The current societal benefit test used in the ERCOT region, and referenced in this order, is the production cost savings test.

This order also addresses resiliency criteria. The adopted rule does not create a third path for approval of a transmission project. Instead, it is an additional consideration that ERCOT and the commission can apply under certain circumstances when considering a reliability or economic project.

### ***Rulemaking Objectives***

The primary objective of this rulemaking is to implement SB 1281, enacted by the 87<sup>th</sup> Texas Legislature. This legislation requires, among other things, that the criteria established by the commission for the evaluation of economic transmission projects include a comparison of the estimated *cost for consumers* to the estimated congestion cost *savings for consumers* that may result from the project. Following the effective date of SB 1281, ERCOT ceased the evaluation of proposed economic transmission projects, citing the need for commission guidance on how to implement this newly required congestion cost savings test.

In order for ERCOT to reinstate the evaluation of economic transmission projects as soon as possible, the commission defers consideration of many transmission-related topics of interest to future potential rulemakings. Among these topics are the designation of critical routes, the evaluation of higher capacity lines on existing rights-of-way, shortening the length of the transmission project approval process, and developing broader and more diverse project evaluation criteria such as multivariate analysis or longer evaluation timeframes. After ERCOT has resumed the consideration of economic transmission projects, the commission will determine whether and how to address these topics.

While every transmission project provides a number of benefits to the grid, the cost of transmission is borne by ratepayers. The adopted rule provides for a pragmatic, iterative process designed to allow the commission – and ERCOT, subject to commission approval – to develop and adjust its transmission planning criteria to ensure those criteria meet the needs of the state without resulting in transmission overbuild. The adopted rule requires ERCOT to immediately resume analysis of economic projects using the pre-existing generator revenue reduction and production cost savings tests. These tests, which each evaluate projects that provide different types of economic value to the ERCOT region, are each supported by years of empirical evidence that demonstrate that they will not result in an excessive number of projects being approved. This approach also provides a high degree of regulatory certainty to transmission developers, generators, and other market participants, because these tests have previously been used in tandem in the ERCOT region.

Following the resumption of economic project evaluation under the above tests, the adopted rule requires ERCOT to develop a new congestion cost savings test to replace the generator revenue reduction test. The pragmatic, iterative methodology referenced also applies to the development of this test. This new test will initially be implemented using ERCOT's current planning study which evaluates transmission projects over a six-year time horizon. ERCOT may, subject to commission approval, modify the parameters of the planning study in the future to ensure that it results in an appropriate number of transmission projects being approved. This flexibility is essential, because while this test is being developed, the ongoing evaluation of economic projects using the production cost savings and generator revenue reduction tests will provide valuable data on the number and types of projects that pass each of these tests. Similarly, once the congestion cost savings test is developed, new data on its implementation will also become available. The

ability of ERCOT and the commission to adapt the planning study without a formal rulemaking – already permitted under existing law – will ensure that an adequate, but not excessive, amount of transmission is being constructed. Finally, the commission may choose to conduct another rulemaking to make additional changes to the test informed by the updated data that will become available.

A secondary objective of this rulemaking is to create a basic process for ERCOT and the commission to identify and address the most significant resiliency issues faced by the ERCOT transmission grid during extreme weather scenarios. Critically, the adopted rule does not create a third category of transmission projects. Instead, this rule allows the resiliency benefits of a proposed project to be considered when evaluating reliability and economic projects in very specific circumstances.

As many commenters have noted, resiliency is an expansive concept that can be measured and supported in many different ways. The adopted rule neither defines resiliency nor develops a comprehensive approach to supporting grid resiliency. Instead, the commission focuses on one aspect of resiliency that can be improved as part of the transmission planning process. Specifically, the adopted rule measures a proposed transmission project's contribution to grid resiliency by assessing its ability to reduce the impacts to customers of potential outages caused by regional extreme weather scenarios. A transmission line that provides significant resiliency benefits of this nature can receive a resiliency "plus factor" to support its approval as either a reliability or economic transmission project.

Extreme weather can occur anywhere in the ERCOT region and every transmission project arguably improves grid resiliency to some degree. However, the cost of transmission is borne by ratepayers throughout ERCOT. Accordingly, the adopted rule requires ERCOT to identify the areas of the state that face *significant* grid resiliency issues in the biennial Grid Reliability and Resiliency Assessment. This identification will be accomplished by measuring the impacts to customers of potential outages caused by regional extreme weather. For example, if an area of the state is known to be particularly susceptible to outages caused by hurricanes damaging a specific transmission line, ERCOT may identify that area as facing a significant resiliency issue. For a project to be eligible for a resiliency plus factor, ERCOT must verify that the project addresses a resiliency issue identified by ERCOT in the Grid Reliability and Resiliency Assessment.

In determining whether to approve a line that ERCOT deems eligible for a resiliency plus factor, the commission will first consider the reliability or economic benefits that the project provides. If the project fails to merit approval based upon these preexisting criteria, the commission will determine, at its discretion, whether the project's resiliency benefits are sufficient to compensate for its inability to otherwise merit approval. In such an instance the applicant must also demonstrate that the proposed transmission project is a cost-effective means of addressing the identified resiliency issue compared to other possible solutions. This criterion is important, because it will allow interested ratepayers or other intervenors in a contested case to scrutinize the need for the line and provide testimony regarding whether the resiliency issue could be better addressed by other, less expensive, or more effective means. Finally, the commission will consider the other factors listed in PURA §37.056(c), as appropriate, to determine whether the line should be approved.



The tertiary objective of this rulemaking is to implement amendments to PURA §37.058, as revised by HB 1510, to clarify that an electric utility operating outside of ERCOT may, but is not required to, obtain a CCN to own or operate a generation facility with a capacity of 10 megawatts or less.

As previously indicated in commission discussions, all other transmission-related objectives are beyond the scope of this rulemaking but may be considered by the commission in a future rulemaking.

### ***Comments***

Several commenters filed comments that either exceeded the noticed changes in the proposal, addressed issues the commission previously indicated may be considered in a future project, or recommended commission action other than modifying the proposed rule language. The commission may address these issues in a separate rulemaking project or by other appropriate means.

### ***Comments not requiring a rulemaking action***

#### ***150-Day ERCOT Review***

Sierra Club and NextEra supported a requirement in the ERCOT Nodal Protocols that ERCOT complete its review of transmission projects within 150 days. NextEra noted that such a suggestion would be outside of the scope of this rulemaking project.

*Instructions from the dais*

APA requested that the commission take immediate action from the dais to order that ERCOT resume analysis of economic upgrades for the 2022 Regional Transmission Plan using the 2011 generator revenue reduction test and existing production cost savings test.

SEIA/TSPA provided recommendations to improve ERCOT's annual Regional Transmission Plan process to consider reliability and economic projects and how to further modify transmission studies to account for generic transmission constraints. SEIA/TSPA noted that such discussions have been tabled in the ERCOT stakeholder process pending the resolution of the implementation of SB 1281. Therefore, SEIA/TSPA respectfully requested the commission indicate, as part of this rulemaking, that further improvements to the transmission planning process that do not require commission rule amendments can be considered in the ERCOT stakeholder process in order to refine transmission planning.

*Congestion cost savings test*

OPUC requested that the congestion cost savings test adopted by ERCOT be brought to the commission in an ERCOT Nodal Protocol for final approval as required by SB 2. This does not require a rulemaking action, because all protocol changes require commission approval.

*Comments addressing issues beyond the rulemaking objectives**Critical reliability designations*

OCSC and OPUC supported establishing criteria for critical reliability designation. OCSC further recommended an accelerated CCN process for transmission projects that would receive such a designation and suggested the commission consider undertaking such a process in a separate

rulemaking project. Lone Star expressed concern that attempting to define or provide criteria for a critical reliability designation would reduce the flexibility necessary for circumstances that may arise in the future.

*Non-wires alternatives*

TAEBA and Sierra Club expressed support for the consideration of non-wires alternatives to transmission, because these alternatives are important for congestion and resiliency. Further, TAEBA requested that the commission begin implementation of SB 415, which authorizes utilities to use battery storage as a reliability service.

*Transmission project cost thresholds*

TCPA and Calpine argued that the actual cost of building a line often exceeds the cost estimates provided in economic cost-benefit studies included in transmission project applications. TCPA argued that ratepayers must not be exposed to excessive costs such that, had the commission been aware of such costs during the approval process, the commission would not have approved the project. TCPA recommended that costs exceeding 105% of the estimate be disallowed. Similarly, Calpine proposed that the commission cap recoverable costs based on the estimate used to justify the project. Alternatively, Calpine recommended the commission require all economic projects to be processed through the regular CCN application process and included in a transmission service provider's rate base. Calpine stated that any cost deviations would then have to be justified by the transmission service provider through a commission prudence review.

*Wholesale cost savings test*

Sierra Club recommended the creation of a third economic test that would measure whether the average annual additional consumer cost savings resulting from lower wholesale energy prices from current and future generation resources would be equal to or greater than the revenue requirement of the proposed project.

*Multivariable analysis*

WETT, CTEI, SIEA/TSPA, AEP/ETT, and TCA/ASC requested that the commission continue to expand the breadth of benefits provided by transmission lines considered when evaluating project proposals. These commenters, who generally recognized this would need to take place in a future project, supported the use of a “multi value” or “multivariable” analysis that would consider additional factors such as resiliency benefits, congestions savings, environmental compliance savings, and market benefits. Oncor, similarly, requested that the commission clarify how operational benefits, such as flexibility for de-energized maintenance, new generation and load siting locations, and grid operational flexibility, that extend beyond the economic analysis are to be taken into account.

TCPA noted the importance of ensuring that the cost of each new transmission line is holistically beneficial to consumers from both a transmission cost and resource adequacy perspective as these costs are passed to consumers through regulated rates. TCPA recommended that the commission specify the inclusion of resource adequacy impacts in the consumer benefits test and included a non-exhaustive list of impacts that should be considered by the commission. TAEBA recommended incorporating an initial multi-value benefits approach in the current rulemaking.

*Production cost savings test modifications*

SEIA/TSPA, LCRA, and APEX argued that the existing production cost savings test is too stringent. APEX argued that the current methodology for the production cost savings test is "artificially constrained," because it does not account for the fact that "both logically and empirically, production cost savings generally grow over time with increasing load and fuel prices." APEX recommended two different methods of modifying the production cost savings calculations and provided redlines for those options in its comments. SEIA/TSPA supported modifying the production cost savings test to consider six-year timeframes for costs and benefits of a proposed project. LCRA, alternatively, suggested that if the commission finds that the existing production costs savings test is too stringent and fails in market participants bringing forward projects with a desired system benefit, then the commission could reduce the required levelized annual production costs savings to a fractional portion of the first-year annual revenue requirement of the proposed project. The proposed rule did not make any substantive modifications to the production cost savings test, and the adopted rule preserves the test in its present form.

*Load-Serving Projects*

TEC requested that the commission modify the proposed language specifying which types of projects qualified as reliability projects and, therefore, were exempt from the consumer benefits test. Specifically, TEC argued that the rule's reference to lines necessary to meet "state and federal reliability standards" is too restrictive and requested the rule explicitly reference transmission lines necessary to serve load. The proposed rule did not contain any substantive modifications to the language classifying reliability projects.

***Proposed §25.101(a)(2) – Definition of a ‘Generating Unit’***

Proposed §25.101(a)(2) defines a generating unit as an electric generating facility and clarifies that this “section does not apply to any generating unit that is ten megawatts or less and is built for experimental purposes.”

ETI recommended that the commission modify the definition of a “generating unit” by deleting the language “and is built for experimental purposes only” because this language is not contained in the statute and would be inconsistent with PURA § 37.058(e).

***Commission Response***

**The commission declines to modify the proposed language as suggested by ETI, because this language is present in the existing rule. Re-evaluating whether units that are built for experimental purposes are generating units is beyond the scope of this rulemaking. Further, as explained in responses to subsection (b)(2)(C), this definition does not create any ambiguity as to the application of this section, as ETI asserts in that context.**

***Proposed §25.101(b) –CCNs for new service areas and facilities; Replacement of the word ‘shall’ with “will”***

Proposed §25.101(b) amended the existing language of the rule from the commission “shall” render a decision approving or denying a CCN application within one year of the date of filing to the commission “will” render such a decision.

ETI stated that in the proposed rule the replacement of the word ‘shall’ to “will” changes the intent of this language and its impact on the status quo is unclear. ETI suggested maintaining the existing rule language, or, in the alternative, using the statutory language and replacing “shall” with "must."

***Commission Response***

**The commission declines to replace “will” with either “shall” or “must” as requested by ETI. “Will,” when used in commission rules indicates how the commission will proceed in a particular circumstance. The commission disagrees that this language should mirror the statutory language. The function of statutory and rule language differs with respect to the commission. Statutes impose obligations on the commission with “must” and “shall,” and the commission’s rules acknowledge that obligation by indicating that the commission will act accordingly.**

***Proposed §25.101(b)(2)(C) – CCN exemptions for Non-ERCOT electric utilities***

Proposed §25.101(b)(2)(C) exempts a non-ERCOT electric utility from being required to obtain a CCN to install, own, or operate a generation facility with a capacity of 10 megawatts or less.

ETI argued that exempting a generation facility with a capacity of 10 megawatts or less, combined with the definition of “generating unit,” which excludes generating units that are ten megawatts or less and are built for experimental purposes, is misleading. ETI argues that these provisions suggest that generating units 10 megawatts or less that are not built for experimental purposes only would be required to obtain a CCN.

*Commission Response*

The commission disagrees with ETI's conclusion. The definition of "generating unit" indicates that this section does not apply to a generation facility that is 10 megawatts or less and built for experimental purposes. Subsection (b)(2)(C) further clarifies that a non-ERCOT generating unit – regardless of whether it was built for experimental purposes – is not required to obtain a CCN under this section.

*Proposed §25.101(b)(3)(A)(i) – Economic transmission projects – Inclusion of direct and indirect costs and benefits*

Proposed §25.101(b)(3)(A)(i) provides that direct and indirect costs and benefits may be included in the cost-benefit study for a proposed project. This language mirrors language in the existing rule.

TIEC and TCPA recommend deleting proposed rule language related to inclusion of "other direct and indirect costs" in the cost benefit study. TCPA recommended deferring consideration of these less defined criteria to a later rulemaking. TIEC asserted that the proposed language could be used to introduce subjectivity in the analysis. TIEC further argued that, if the commission intends to retain this language it should modify the proposed rule in manner that parallels language from ERCOT Nodal Protocol § 3.11.2(6), which limits ERCOT to consider indirect impacts that are "reasonably expected to be on-going[,] adequately quantifiable and unavoidable."

Conversely, Lone Star and LCRA supported the proposal to broaden the evaluation of benefits to include other direct and indirect costs and benefits.



*Commission Response*

The commission disagrees with TIEC that the proposed language may *introduce* subjectivity to the evaluation of economic projects, because the existing rule already permits the inclusion of “indirect costs and benefits to the transmission system” in the cost benefit study. Furthermore, as TIEC notes, the ERCOT Protocols place conditions on the indirect benefits ERCOT considers in its cost benefit studies. The commission modifies the language to specify that indirect costs and benefits of a transmission project presented in an economic cost benefit study must be ongoing and adequately quantifiable, consistent with ERCOT’s current practices.

*Applicability to Non-ERCOT Utilities*

ETI noted that the deletion of language related to ‘ERCOT power region’ in proposed §25.101(b)(3)(A)(i) appears to expand applicability of this clause to all transmission lines, rather than just those in the ERCOT region. ETI suggested that if the commission wanted to expand the applicability of the clause, corresponding adjustments to the remaining language in the rule would be required to clarify how those provisions apply to non-ERCOT utilities. ETI provided redlines to clarify these differences.

SWEPCO recommended restoring the existing language that specified that this provision only applied in the ERCOT region to avoid uncertainty about whether or how the rule could interact with transmission planning processes outside ERCOT.

*Commission Response*

The commission agrees with ETI and SWEPCO that the rule language, as proposed would apply ERCOT economic project criteria to utilities outside of ERCOT, which is not the commission's intent. Accordingly, the commission modifies the language to include "in the ERCOT power region" to clarify applicability of the rule text.

TEC recommended that the rule clarify that reliability and load growth projects are not subject to the congestion cost savings test. TEC provided revised language for §25.101(b)(3)(A)(i) and (ii) to indicate that the congestion cost savings test does not apply to reliability projects under §25.101(b)(3)(A)(iii) and (iv), or to projects located outside of ERCOT.

*Commission Response*

The commission agrees with TEC that reliability projects are not required to pass the congestion cost savings test. The commission modifies the rule such that a cost benefit analysis study is required "[e]xcept as otherwise stated in this subparagraph." This language, along with the explicit exemption from economic tests for reliability projects in adopted §25.101(b)(3)(A)(ii), makes it clear reliability projects are not subject to a congestion cost savings test.

***Proposed §25.101(b)(3)(A)(i)(I) - Economic transmission projects – Congestion cost savings test evaluation time frame***

Proposed §25.101(b)(3)(A)(i)(I) establishes a requirement that the cost-benefit study for a proposed project must include a comparative analysis of levelized annual congestion cost savings for consumers and the first-year annual revenue requirement for the transmission project.

Sierra Club and CTEI recommended modifying the proposed rule such that the evaluation period over which congestion cost savings and revenue requirement are measured is either six or ten years. CTEI further recommended that the evaluation period may even be extended to between 20 and 40 years.

CenterPoint, OPUC, and WETT recommended that the costs in the congestion cost savings test be compared to a levelized six-year revenue requirement. Both WETT and CenterPoint stated that six-year time period is appropriate because it matches the six-year planning period in ERCOT's Regional Transmission Plan. TPPA also recommended comparing cost savings against a levelized six-year revenue requirement.

SEIA/TSPA commented that the proposed language creates a barrier to approval of economic projects. Therefore, they proposed language to include a comparison of an annualized six-years of savings to six-years of costs, and a corresponding change to the production cost savings test under subclause (b)(3)(A)(i)(II).

Sharyland and TAEBA recommended that the congestion cost savings test evaluation period be revised to compare the levelized annual congestion cost savings to the levelized 10-year revenue requirement of the proposed transmission project. Sharyland explained that the first-year revenue requirement can be over 33 percent higher than the levelized cost of a project over its useful life.

Sharyland further commented that an exact matching of the savings period and the cost period is not necessary to implement the test under SB 1281. Conversely, TEC recommended that the time period over which congestion costs savings are compared to the revenue requirement of the proposed project must be aligned.

TIEC recommended that ERCOT continue its prior practice of using the first-year revenue requirement as a proxy for costs but did not object to levelizing the first two- or three-years' revenue requirement if the commission sought to lower the bar for economic projects. With respect to cost savings, TIEC's primary recommendation was to leave the evaluation period unspecified and allow ERCOT to determine the appropriate period in its protocols. Alternatively, TIEC also supported levelizing cost savings over the first three years and commented that any longer evaluation time frame may unduly bias the analysis toward additional transmission buildout. TIEC did not support any timeframe for economic analysis that went beyond ERCOT's existing near term planning models.

TEC recommended that the congestion cost savings and revenue requirement of the proposed project be compared over a levelized three-year time period because the forecasting in cost-benefit analyses for transmission projects becomes more speculative after the first three years. Inputs like

natural gas prices and load projections cannot be estimated with any certainty several years into the future. TEC further explained that locational marginal prices (LMPs), which are a component of generator revenue reduction test, are volatile and slight overloads of transmission elements can send LMPs to very high levels or very low levels. Inaccuracies in expected load, generation and transmission may be more magnified beyond a three-year period.

NextEra recommended that the levelized annual congestion cost savings for the consumers be compared with an annual transmission revenue requirement that is levelized over the entire cost recovery period. Similar to TIEC's primary recommendation, NextEra supported leaving the evaluation period for cost savings undefined in the rule. NextEra supported using ERCOT's current planning study to evaluate cost savings and recommended that the commission work with ERCOT to develop new planning studies in the future.

AEP/ ETT recommended adopting a cost-benefit analysis that compares a transmission project's levelized revenue requirement against the full range of levelized benefits provided by the project. AEP/ETT asserted that a comparison with only the first-year revenue requirement significantly overstates the project's levelized cost over its useful life. TCA/ASC commented that the analysis of cost savings should be over at least 10 to 20 years to reflect real transmission impacts over its 40 to 60-year lifespan. APA/ACPA also recommended using a 20-year period for calculation of costs and benefits for both the congestion cost savings and production cost savings test and provided redlines. Similarly, ACE/CCR recommended an evaluation period of 20 to -40 years and suggested that the evaluations be based on net present value or a comparison of levelized benefits and costs.

Oncor did not suggest a time period for comparison of costs and benefits. Oncor noted that such a comparison is difficult given the differences in how costs and benefits are calculated. While the cost calculation is relatively simple and quantifiable, a benefit calculation for a project is complex, because it involves predicting future grid operations and market outcomes. Additionally, the future time period in which ERCOT can reasonably calculate these savings is limited by the availability of credible economic models. ERCOT's ability to model near time potential benefits of a project may be limited to six years, but the economic benefits of a project may extend beyond six years.

### *Commission Response*

**As discussed under rulemaking objectives above, the adopted rule provides for a pragmatic, iterative approach to transmission planning. The number and type of transmission projects that will be approved under the new congestion cost savings test cannot be evaluated before it is developed. Furthermore, the commission is currently contemplating changes to the design of the competitive market. These changes could alter the appropriate balance between transmission and market-based solutions to congestion. Accordingly, the commission agrees with NextEra that the rule should not specify the exact evaluation period. Instead, the adopted rule requires ERCOT to use the planning study identified in the ERCOT planning guide. Initially, ERCOT will use its current planning study, which has a six-year horizon. ERCOT, subject to commission approval, will have the flexibility in the future to modify its study or develop a new study to better meet the needs of the ERCOT system.**

With respect to the consideration of project costs, the commission agrees with TIEC and TEC that the average of the first three-years' revenue requirement sets a slightly lower bar for the approval of transmission projects without resulting in transmission overbuild as the new test is implemented.

*Proposed §25.101(b)(3)(A)(i)(I)(a) - Economic transmission projects – Development of new congestion cost savings test*

Proposed §25.101(b)(3)(A)(i)(I)(a) establishes a requirement for ERCOT to develop a new congestion cost savings test in consultation with commission staff.

TEC recommended that the rule provide guidance to ERCOT in developing the parameters of the new congestion cost savings test. TEC suggested incorporating specific criteria in the new test. Such criteria should determine impacts of planned and unplanned outages (both transmission and generation) on historical and future congestion costs. Criteria to accurately forecast load growth to determine estimates for future congestion costs should also be included. Further, TEC emphasized that the new test should be designed with parameters that evaluate the impact of a transmission line on resource adequacy in the ERCOT market and should ensure that generation resources continue to be built.

TCPA noted that avoided congestion costs do not reflect the full picture for consumers paying for new transmission lines. TCPA recommended that the congestion cost savings test include additional components that evaluate the impact of the transmission line on resource adequacy, on

increase or decrease of volatility on the system, retirement of dispatchable resources, and the net capacity factor of the resources for which the transmission line is being constructed.

Additionally, TCPA suggested the congestion cost analysis should also include Congestion Revenue Right Auction Revenue Distributions (CARD) rebated to load for a proper cost benefit analysis of congestion costs borne by consumers because this refund offsets congestion costs for consumers.

***Commission Response***

**The commission declines to incorporate commenters' suggested language relating to parameters to be included in the new congestion cost savings test. The commission has provided broad guidance on the new test components as statutorily required but finds it premature to prescribe parameters for the test at this time. The new test will be developed by ERCOT – in consultation with commission staff and subject to commission approval – where the appropriateness of the parameters to be included in the test can be fully analyzed.**

***Proposed §25.101(b)(3)(A)(i)(I)(-b-) - Economic transmission projects – Use of older 'generator revenue reduction' test to evaluate projects in the interim***

Proposed §25.101(b)(3)(A)(i)(I)(-b-) allows ERCOT to reinstate a previously retired 'generator revenue reduction' test in place of the new congestion cost savings test until the new test is implemented.



OCSC, Sierra Club, CenterPoint, WETT, CTEI, Oncor, Sharyland, Lone Star, NextEra, TEC, APAACPA, ACE/CCR and TIEC supported the use of the 2011 generator revenue reduction test as an interim approach. Use of this test will expeditiously start the evaluation of economic transmission projects while ERCOT develops a new congestion cost savings test.

Calpine and TCPA provided redlines striking the interim generator revenue reduction test without discussion.

### *Commission Response*

**Under the adopted rule, ERCOT may begin evaluating economic projects using the 2011 generator revenue reduction test while the new congestion cost savings test is being developed. The commission modifies the proposed rule to further specify that ERCOT may immediately begin using the generator revenue reduction test without delaying until its protocols can be updated.**

NextEra suggested modifying the proposed rule to clarify that generator revenue reduction test calculations should not be used to evaluate projects after the new congestion cost savings test is implemented. NextEra recommended that only those applications that were submitted to the commission and docketed prior to the effective date of the new congestion cost saving test may be evaluated using the generator revenue reduction test.

*Commission Response*

The commission declines to modify the rule to limit ERCOT's use of the generator revenue reduction test to docketed applications after the effective date of the congestion cost savings test. Requiring a transmission project that has already been evaluated using the generator revenue reduction test to submit a cost benefit study with a congestion cost savings analysis would be burdensome for both ERCOT and the applicant and result in unnecessary delays. However, the commission modifies the rule to clarify that ERCOT may only continue to rely upon "completed" generator revenue reduction calculations after the congestion cost savings test becomes effective. This modification establishes a clear bright line for when ERCOT must discontinue use of the generator revenue reduction test.

*Proposed §25.101(b)(3)(A)(ii) - Economic transmission projects – Requirement to demonstrate savings either under congestion cost savings test or production cost savings test*

Proposed §25.101(b)(3)(A)(ii) establishes the requirement for a proposed economic transmission project to demonstrate savings either under the congestion cost savings test or production cost savings test.

Sierra Club, OCSC, WETT, TPPA, APA/ACPA, and SEIA/TSPA supported retaining the production cost savings test and stated that the statute did not eliminate the production cost savings test. OCSC and OPUC supported consideration of both the congestion cost savings test and the production cost savings test in the economic cost benefit study. LCRA, WETT, ACE/CCR, and TPPA supported meeting either the consumer benefit or production cost savings tests for approval of an economic transmission project.

Representative Darby argued that both the plain language of the statute and the legislative intent entered into the record by Representatives King and Zwiener support retaining the production cost savings test. SB 1281 states that the criteria used by the commission to analyze a proposed transmission project "must include" an analysis of congestion cost savings for customers. Representative Darby further argued that the word "include" means "to take in or comprise as part of a whole or group." In this instance, the use of the plural "criteria" and the word "include" indicates that the new congestion cost savings test is but one of several criteria at the commission's disposal, including the production cost savings test. Representative Darby also argued that using only the congestion cost savings test or requiring projects to pass both tests would undermine reliability and affordability. Representative Darby cited to ERCOT's white paper on economic analysis of transmission that states "there is general industry consensus that changes in production costs are the appropriate primary justification for economic transmission projects," and that application of an additional consumer savings criterion risks constraining efficient generation, undermining new generation investment, and ultimately raising wholesale prices.

Calpine, TIEC, Chairman Hancock, and Chairman Metcalf each supported elimination of the production cost savings test. Chairman Hancock stated that the legislative intent of SB 1281, which was reflected in its filed bill analysis, was for all economic transmission projects to be evaluated using the congestion cost savings test. Chairman Hancock further argued that the production cost savings test primarily measured the cost of generators' fuel costs, which may or may not translate to changes on customers' bills.

Calpine, TIEC, and Chairman Metcalf agreed with Chairman Hancock's arguments. Chairman Metcalf commented that a production cost savings test must not be the standalone basis for evaluating and approving economic transmission projects and that these projects must be justified based on benefits to consumers. Similarly, TIEC stated that all economic transmission projects must satisfy the congestion cost savings test to prove that it will benefit the end-use ratepayer. TIEC supported consideration of the results of a production cost savings test only as a "tie-breaker" when choosing between economic transmission projects. TIEC recommended deleting §25.101(b)(3)(A)(ii) so the commission has flexibility to consider the results of the congestion cost savings test and the production cost savings test while still fulfilling PURA § 37.056(d) and SB 1281's requirements that all economic transmission projects must demonstrate projected savings for consumers.

### *Commission Response*

**The commission interprets SB 1281 to provide the commission with discretion over whether to preserve the production cost savings test. The plain language of SB 1281 directs the commission to develop criteria for the evaluation of economic projects that "must include" a congestion cost savings test. Under the Texas Code Construction Act, "include" is a "[term] of enlargement and not of limitation or exclusive enumeration, and use of the [term] does not create a presumption that components not expressed are excluded." The adopted rule complies with this statutory mandate by requiring all economic projects be evaluated using the congestion cost savings test.**

As described in the discussion of rulemaking objectives above, this rule provides for a pragmatic, iterative process designed to allow the commission – and ERCOT subject to commission approval – to develop and adjust its transmission planning criteria until those criteria meet the needs of this State without resulting in transmission overbuild. Accordingly, because SB 1281 does not require the elimination of the production cost savings test, the adopted rule provides that the commission may approve an economic project that passes the production cost savings test. As noted by Representative Darby, production cost savings tests are used throughout the industry to measure the economic value of transmission, because an exclusive focus on congestion cost savings “risks constraining efficient generation, undermining new generation investment, and ultimately raising wholesale prices.” Eliminating the production cost savings test and the value that it provides may be considered in a future project when more data becomes available on the comparative benefits of the two tests.

The commission disagrees with comments that retaining both tests risks a transmission overbuild. The production cost savings test and generator revenue reduction test have been used in tandem in the ERCOT region previously and are supported – both individually and together – by years of empirical evidence that demonstrates that they will not result in an excessive number of projects being approved. Furthermore, as the new congestion cost savings test is being developed, the continued use of both tests will generate valuable data that will inform future commission action on this issue.

**The commission also modifies the proposed rule by adding language that “ERCOT may recommend, and the commission may approve” a project that demonstrates savings under either the production cost savings test or congestion cost savings test to clarify that the commission retains discretion to ultimately determine whether a proposed project is needed.**

***Proposed §25.101(b)(3)(A)(iv) - Reliability transmission projects – Additional load growth considerations for project evaluation***

Proposed §25.101(b)(3)(A)(iv) delineates the categories of load growth that should be considered while evaluating proposed reliability transmission projects.

TEC commented that the proposed language under this clause creates a conflict with the ERCOT Protocols by requiring submission of project-specific information to ERCOT for Tier 4 type projects. Such projects are not required to be submitted to ERCOT or regional planning group review and do not undergo independent review by ERCOT. TEC commented that this would be a material policy change and provided proposed language to address this issue.

***Commission Response***

**The commission agrees with TEC that the proposed language does not clearly differentiate between transmission projects that need to be reviewed by ERCOT and those that do not. The commission adopts TEC’s recommended language.**

Oncor and TNMP commented that the commission should provide direction or metrics to consider projected load growth (and specifically non-contractually committed load growth) while

evaluating the need for reliability transmission projects. Oncor and TNMP each provided language that granularly identifies load categories recommended for consideration by ERCOT and the commission. Further, Oncor opined that SB1281 requires additional consideration of forecasted load because historically this category has not been given sufficient weight in the transmission planning and certification process. Oncor commented that, unless the commission provides specific directives on this process, it would be endorsing the status quo.

CenterPoint supported Oncor's proposed language and suggested that ERCOT should give more weight to a TDSP's load growth forecast, which may include non-contractually committed load. Such non-contractually committed load may constitute "additional load currently seeking interconnection".

LCRA recommended deleting the proposed non-statutory language "as determined by ERCOT" because it introduces unnecessary ambiguity. LCRA suggested that if the language was intended to modify only "additional load currently seeking interconnection," this should be clarified.

### *Commission Response*

**The commission disagrees that not providing specific directives on how to evaluate additional load seeking interconnection in the rule is an endorsement of the status quo. Consistent with SB 1281, the proposed rule requires ERCOT to consider additional load seeking interconnection in its load forecasts. However, imposing specific criteria on these forecasts at this time would undermine ERCOT's ability to consider the best available evidence when developing its forecasts.**

ERCOT has continuously worked to improve its load forecasting capabilities, including implementing a load review process in 2018, making several updates to the process, working with transmission service providers to better capture hard-to-forecast load types, and purchasing additional data sets and studies. Outside of a few difficult-to-forecast loads such as oil and gas producers in west Texas or other novel industrial load types, ERCOT's load growth projections have not consistently over- or underestimated load growth in recent years.

If ERCOT is not able to evaluate, and when necessary, reject, evidence of load growth it may result in an overestimation of load growth and an overbuild of transmission. Given the significant number of megawatts that are currently seeking interconnection but are not yet contractually committed, the risk of such a overbuild is not hypothetical. Accordingly, the commission modifies the rule to require that load growth forecasts are substantiated by quantifiable evidence.

***Proposed §25.101(b)(3)(A)(v) – Resiliency***

Proposed §25.101(b)(3)(A)(v) delineates the criteria for approval of transmission projects that address a resiliency issue identified in ERCOT's grid reliability and resiliency assessment report.

OCSC, TCPA, WETT, TEC, Calpine, TPPA, LCRA, and TIEC argued that resiliency should be removed from the rule and taken up in a separate project. These commenters were primarily



concerned with the complexity of the concept of resiliency, a lack of clarity on the definition of resiliency, and a lack of firm and specific criteria that would be used to evaluate resiliency projects.

Calpine and TIEC further argued that the commission should not establish a separate category of resiliency projects. Calpine argued that there is no specific need for additional "resiliency criteria" as the resiliency concept for transmission planning is sufficiently addressed by NERC TPL-001-5.1. This standard is a transmission system planning performance requirement to "develop a Bulk Electric System (BES) that will operate reliably over a broad spectrum of System conditions and following a wide range of probable Contingencies." This standard has worked well for ERCOT as the current models include close to 20,000 contingencies which are developed by TSPs and ERCOT. The list is dynamic and can be amended as system conditions evolve to sufficiently addresses any resiliency concerns.

Conversely, Oncor, Sierra Club, Sharyland, TAEBA, OPUC, NextEra, TNMP, and AEP/ETT supported the approach of allowing the commission to consider resiliency issues that are identified in ERCOT's biennial grid assessment. These commenters generally expressed the importance of planning for resiliency, and NextEra argued that the proposed approach strikes an appropriate balance between not prematurely adopting a formal definition of resiliency and excluding resiliency considerations all together. AEP/ETT commented that they did not believe the proposed resiliency criteria would result in a rubber stamp, because the rule limits consideration of resiliency to specific resiliency issues identified by ERCOT.

There was also wide agreement by many of the above commenters on both sides of the issue that the commission should continue to study resiliency issues in the future.

### *Commission Response*

The commission declines to remove resiliency criteria from the proposed rule. The commission disagrees that the proposed rule needs a definition of resiliency. As described under project objectives above, for purposes of this rule, areas that experience outages due to extreme weather scenarios experience resiliency issues. The severity of a resiliency issue is measured by the impacts that it has on consumers. By directing ERCOT to identify the areas of the state experiencing the most significant resiliency issues, the rule allows ERCOT to apply its expertise on reliability and resiliency to determine the best way to identify these issues.

The commission also disagrees that this rule lacks sufficiently specific criteria for consideration of resiliency. Under this rule, transmission projects must still be proposed as either reliability or economic projects. Each of these project types provides the commission with well understood means of evaluating individual projects. If a project also addresses a pre-identified resiliency issue, the project may receive a plus factor. In order to receive that plus factor, though, ERCOT has to verify that the project will address the resiliency issue, and the applicant still has the obligation to prove that the project is cost effective relative to other means of addressing the resiliency issue. Ultimately, the commission will have to balance whether the resiliency benefits asserted are sufficient to compensate for the project's inability to merit approval on economic or resiliency grounds, but this is no different than

any other contestable public interest issue that the commission evaluates. The commission, for instance, does not apply a formula when determining if a more expensive transmission route is justified by community values or environmental integrity.

The commission also disagrees with Calpine's argument that current NERC standards are sufficient to ensure the resiliency of the grid. Extreme weather scenarios, such as hurricanes, can present issues for the grid beyond those captured by our current NERC-compliant reliability criteria. Moreover, ERCOT is charged with compliance with NERC standards and producing the grid assessment study and will have detailed knowledge of both. If, as Calpine suggests, ERCOT is unable to identify any significant resiliency issues that are not already addressed by our current resiliency criteria, then ERCOT can indicate as much in the grid assessment report.

WETT suggested that if resiliency is included in the adopted rule, the rule should require ERCOT to evaluate a proposed project's anticipated effects on resiliency issues and provided redlines.

#### *Commission Response*

The commission agrees with WETT that ERCOT must determine that a transmission project will address a resiliency issue identified in the grid assessment study before the resiliency benefits of the project can be used to support the project's approval. The commission modifies the rule accordingly.

NextEra suggested modifying the rule to allow the commission to consider resiliency benefits that are identified by ERCOT and by other market participants. Similarly, CenterPoint suggested modifying the rule language such that the commission could consider transmission projects that address resiliency issues identified either by the commission itself, or by an applicant.

*Commission Response*

**The commission disagrees with NextEra and CenterPoint that the rule should permit market participants to identify and propose resiliency issues to support the approval of a transmission project. As discussed under the rulemaking objectives section above, transmission costs are borne by ratepayers, so only the most significant resiliency issues should be considered for transmission planning purposes. ERCOT is well positioned to identify these issues in its grid reliability and resiliency assessment, because ERCOT has a broad view from which to assess and compare resiliency risks across the system.**

LCRA recommends deleting “or otherwise” from the requirement that the commission consider whether the proposed line is a cost-effective means of addressing the resiliency issues “compared to other possible solutions, transmission or otherwise.” LCRA argues that ERCOT is not equipped to compare transmission and non-wires solutions.

*Commission Response*

**The commission disagrees with LCRA that the commission should not consider whether a resiliency issue could be more effectively addressed by a non-wires solution. Transmission costs are borne by the ratepayer, so a project that does not merit approval on reliability or economic grounds can only receive a resiliency plus factor if there are not better solutions to**

**the resiliency issue. The rule language is intended to allow consumers and other parties to a contested case to challenge whether the proposed line is in the public interest.**

**The commission modifies the rule by removing “transmission or otherwise,” because this phrase is unnecessary.**

TEC commented that the rule should not assume that resiliency projects fail to provide economic or reliability benefits but should recognize that a resiliency project may also provide reliability and economic benefits.

***Commission Response***

**Resiliency is only considered as a plus factor in certain circumstances for transmission projects that do not otherwise merit approval on reliability or economic grounds. Because every transmission project must be proposed as a reliability or an economic project, every project must also provide some reliability or economic benefit. Therefore, TEC’s requested clarification that resiliency projects provide other benefits is unnecessary. However, the commission does rephrase the resiliency requirements to clarify that resiliency is not a new, separate category of projects.**

***Proposed §25.101(b)(3)(E) - Grid Reliability and Resiliency Assessment.***

Proposed §25.101(b)(3)(E) requires ERCOT to conduct a biennial assessment of the ERCOT power grid's reliability and resiliency in extreme weather scenarios and delineates the components of this assessment.

TPPA commented that the proposed language instructs that each grid assessment must consider the impact of different levels of thermal generation availability but does not define what types of generation are considered ‘thermal’ and also does not clarify if utility scale storage and distributed energy resources are part of this assessment. TPPA recommended that the commission provide precise directives to ERCOT that define the intent behind conducting the assessment.

### *Commission Response*

**The commission declines to provide ERCOT with specific direction on classifying types of generation resources in the assessment at this time. ERCOT is charged with the responsibility to assess its power grid’s reliability and is well positioned to decide which types and levels of generation availability may impact grid reliability and resilience. ERCOT should consider whether and how each generation type supports the reliability and resiliency of the grid when classifying different resource types. Further, ERCOT should provide enough information in the grid assessment study to make it clear how each category is defined and how the features of each type of generation support the findings of the study.**

AEP/ETT recommended expanding the ERCOT grid assessment to consider the benefits of generic transmission constraint (GTC) exit solutions because GTCs tend to increase both congestion costs and the complexity of securely operating the system. AEP/ETT explained that although ERCOT studies GTC exit solutions, no planning process exists for authorizing construction of facilities for an identified GTC resolution, and the grid reliability and resiliency assessment study can be expanded to provide this process.

*Commission Response*

The commission disagrees with AEP/ETT that the scope of ERCOT grid reliability and resilience study needs to be expanded to consider GTC exit solutions. ERCOT is well positioned to decide the parameters for the grid assessment study for reliability and resiliency purposes. Consistent with the rulemaking objectives outlined above and the commission's iterative approach to transmission planning in this rulemaking proceeding, the commission may consider further improvements or expansions to the grid assessment study in a future project.

TEC suggested that the commission define "extreme weather scenarios" either in this rulemaking or through a formal process at ERCOT. TEC explained that if "extreme weather scenarios" include an open-ended range of weather scenarios, ERCOT's recommendations, if adopted, could substantially increase costs to all transmission ratepayers without an accompanying reliability benefit. TCA recommended expanding extreme weather scenarios to include climate change considerations.

TEC, TNMP, and CenterPoint also suggested that the commission direct ERCOT to develop the scope and procedures for conducting the assessment through a stakeholder process.

*Commission Response*

**The commission declines to modify the rule to define “extreme weather” or to explicitly require a consideration of climate change. ERCOT is well positioned to identify which types of regional extreme weather scenarios pose the most significant resiliency issues.**

**Further, the commission declines to explicitly require ERCOT to consult with stakeholders to develop the parameters of the grid assessment as requested by TEC, TNMP and CenterPoint. SB 1281 directed ERCOT to conduct this biennial grid assessment. ERCOT should rely upon its own governing documents and established practices for determining the appropriate procedures for developing the assessment.**

TEC recommended that the references to “load shed” in the grid resiliency assessment and in the proposed resiliency language under §25.101(b)(3)(A)(v) be changed to ‘outages’ because resiliency projects should consider outages of all kinds, whether due to ordered load shed or a catastrophic weather event.

*Commission Response*

**The commission agrees with TEC that resiliency should consider “outages” caused by extreme weather and not just instances of “load shed.” The commission modifies the rule accordingly.**

TPPA advised to move the grid assessment to a new subsection or section instead of organizing it under subsection (b).



*Commission Response*

The commission declines to reorganize the placement of the grid assessment study within its substantive rules at this time. The commission can only modify rules that were noticed in the *Texas Register*, but the commission may consider relocating this study to a different rule in a future project.

*§25.101(c)(5)(A)(ii) – CCN exemption for routine activities*

Under proposed §25.101(c)(5)(A)(ii), for a modification, construction, or extension of a transmission line to qualify for a CCN exemption, all rights-of-way necessary for the modification, construction, or extension must have been purchased.

TPPA recommended replacing the term “purchased” with the term “acquired” in proposed §25.101(c)(5)(A)(ii) to account for instances where a landowner may donate the necessary right-of-way to expedite the interconnection process.

*Commission Response*

The commission agrees with TPPA’s recommendation to replace the term “purchased” with the term “acquired” in §25.101(c)(5)(A)(ii) to account for land donated to expedite interconnection or obtained by other means.

The commission modifies the rule accordingly.

All comments, including any not specifically referenced herein, were fully considered by the commission. In adopting this rule, the commission makes other minor modifications for the purpose of clarifying its intent.

The proposed rule is adopted under PURA §14.002, which provides the commission with the authority to adopt and enforce rules reasonably required in the exercise of its powers and jurisdiction; PURA §37.052 that clarifies projects or activities that do not require an electric utility to amend a transmission CCN; PURA §37.056, which establishes a congestion savings test for evaluating economic transmission projects and also requires the commission to consider historical load, forecasted load growth, and additional load seeking interconnection while evaluating reliability transmission projects in ERCOT region; PURA §37.058 that exempts an electric utility that operates solely outside of ERCOT, from requiring a certificate for a generating facility with a capacity of 10MW or less; and also PURA §39.159 that requires ERCOT to conduct a biennial assessment of the ERCOT power grid's reliability in extreme weather scenarios to recommend transmission projects.

Cross reference to statutes: PURA §14.002, §37.052, §37.056, §37.058, and §37.159.

**§25.101. Certification Criteria.**

- (a) **Definitions.** The following words and terms, when used in this section, have the following meanings unless the context indicates otherwise:
- (1) **Construction or extension** --Does not include the purchase or condemnation of real property for use as facility sites or right-of-way. Acquisition of right-of-way must not be deemed to entitle an electric utility to the grant of a certificate of convenience and necessity without showing that the construction or extension is necessary for the service, accommodation, convenience, or safety of the public.
  - (2) **Generating unit** -- Any electric generating facility. This section does not apply to any generating unit that is ten megawatts or less and is built for experimental purposes only.
  - (3) **Habitable structures** -- Structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis. Habitable structures include, but are not limited to: single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, and schools.
  - (4) **Municipal Power Agency (MPA)** -- Agency or group created under Texas Utilities Code, Chapter 163 – Joint Powers Agencies.
  - (5) **Municipal Public Entity (MPE)** -- A municipally owned utility (MOU) or a municipal power agency.
  - (6) **Prudent avoidance** -- The limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort.

- (7) Tie line -- A facility to be interconnected to the Electric Reliability Council of Texas (ERCOT) transmission grid by a person, including an electric utility or MPE, that would enable additional power to be imported into or exported out of the ERCOT power grid.
- (b) **Certificates of convenience and necessity for new service areas and facilities.** Except for certificates granted under subsection (e) of this section, the commission will grant an application and issue a certificate only if it finds that the certificate is necessary for the service, accommodation, convenience, or safety of the public, and complies with the statutory requirements in the Public Utility Regulatory Act (PURA) §37.056. The commission may issue a certificate as applied for, or refuse to issue it, or issue it for the construction of a portion of the contemplated system or facility or extension thereof, or for the partial exercise only of the right or privilege. The commission will render a decision approving or denying an application for a certificate within one year of the date of filing of a complete application for such a certificate, unless good cause is shown for exceeding that period. A certificate, or certificate amendment, is required for the following:
- (1) **Change in service area.** Any certificate granted under this section must not be construed to vest exclusive service or property rights in and to the area certificated.
- (A) **Uncontested applications:** An application for a certificate under this paragraph must be approved administratively within 80 days from the date of filing a complete application if:
- (i) no motion to intervene has been filed or the application is uncontested;

- (ii) all owners of land that is affected by the change in service area and all customers in the service area being changed have been given direct mail notice of the application; and
- (iii) commission staff has determined that the application is complete and meets all applicable statutory criteria and filing requirements, including, but not limited to, the provision of proper notice of the application.

(B) Minor boundary changes or service area exceptions: Applications for minor boundary changes or service area exceptions must be approved administratively within 45 days of the filing of the application provided that:

- (i) every utility whose certificated service area is affected agrees to the change;
- (ii) all customers within the affected area have given prior consent; and
- (iii) commission staff has determined that the application is complete and meets all applicable statutory criteria and filing requirements, including, but not limited to, the provision of proper notice of the application.

(2) **Generation facility.**

- (A) In a proceeding involving the purchase of an existing electric generating facility by an electric utility that operates solely outside of ERCOT, the commission will issue a final order on a certificate for the facility not later

than the 181<sup>st</sup> day after the date a request for the certificate is filed with the commission under PURA §37.058(b).

(B) In a proceeding involving a newly constructed generating facility by an electric utility that operates solely outside of ERCOT, the commission will issue a final order on a certificate for the facility not later than the 366<sup>th</sup> day after the date a request for the certificate is filed with the commission under PURA §37.058(b).

(C) An electric utility operating solely outside of the ERCOT region may, but is not required to, obtain a certificate to install, own, or operate a generation facility with a capacity of 10 megawatts or less.

(3) **Electric transmission line.** All new electric transmission lines must be reported to the commission in accordance with §25.83 of this title (relating to Transmission Construction Reports). This reporting requirement is also applicable to new electric transmission lines to be constructed by an MPE seeking to directly or indirectly construct, install, or extend a transmission facility outside of its applicable boundaries. For an MOU, the applicable boundaries are the municipal boundaries of the municipality that owns the MOU. For an MPA, the applicable boundaries are the municipal boundaries of the public entities participating in the MPA.

(A) **Determination of need:**

(i) **Economic projects.** Except as otherwise stated in this subparagraph, the following must be met for a transmission line in the ERCOT region. The applicant must present an economic cost-benefit study that analyzes the transmission project under a

congestion cost savings test and a production cost savings test. The commission will give great weight to such a study if it is conducted by the ERCOT independent system operator. Adequately quantifiable and ongoing direct and indirect costs and benefits to the transmission system attributable to the project may be included in the cost-benefit study.

(I) **Congestion cost savings test.** ERCOT, in consultation with commission staff, must develop a congestion cost savings test.

(-a-) The congestion cost savings test must include an analysis of whether the levelized ERCOT-wide annual congestion cost savings attributable to the proposed project are equal to or greater than the average of the first three years annual revenue requirement of the proposed project of which the transmission line is a part.

(-b-) Prior to the effective date of the test developed by ERCOT under this subclause ERCOT may immediately, without updating its current protocols, utilize the generator revenue reduction test, effective Dec. 1, 2011 under ERCOT Nodal Protocols §3.11.2(6), as the congestion cost benefit test required under this clause. ERCOT may continue to

rely upon completed calculations using the generator revenue reduction test to evaluate ongoing applications after the effective date of the test developed under this subclause.

(II) **Production cost savings test.** The production cost savings test must include an analysis of whether the levelized ERCOT-wide annual production cost savings attributable to the proposed project are equal to or greater than the first-year annual revenue requirement of the proposed project of which the transmission line is a part.

(III) Economic cost-benefit analysis must be studied for the projected in-service date of the project using the study case identified in the ERCOT planning guide.

(IV) ERCOT may recommend, and the commission may approve, a transmission line in the ERCOT region that demonstrates a savings under either a congestion cost savings test or a production cost savings test.

(ii) **Reliability projects.**

(I) The requirements of clause (i) of this subparagraph do not apply to an application for a transmission line that is necessary to meet state or federal reliability standards, including: a transmission line needed to interconnect a transmission service customer or end-use customer; or



needed due to the requirements of any federal, state, county, or municipal government body or agency for purposes including, but not limited to, highway transportation, airport construction, public safety, or air or water quality.

- (II) For a transmission line not addressed by clause (i) of this subparagraph, the commission will consider, among other factors, the needs of the interconnected transmission systems to support a reliable and adequate network and to facilitate robust wholesale competition. When evaluating reliability for a proposed project in the ERCOT region, the commission will consider and any review conducted by ERCOT must incorporate the historical load, forecasted load growth, and additional load currently seeking interconnection. The forecasted load growth and additional load currently seeking interconnection must be substantiated by quantifiable evidence of projected load growth. The commission will give great weight to:

- (-a-) the recommendation of an organization that meets the requirement of PURA §39.151; and/or
- (-b-) written documentation provided by a transmission service provider to ERCOT that the transmission line is needed to interconnect transmission service or retail customers.

(iii) **Resiliency.** ERCOT may recommend, and the commission may approve, a transmission project that is submitted as an economic or reliability project and does not demonstrate sufficient economic savings or reliability benefits to merit approval on those grounds if ERCOT determines the line would address a resiliency issue identified in the grid reliability and resiliency assessment required by subparagraph (E) of this paragraph. In determining whether to approve such a project the commission will consider:

- (I) the margin by which the transmission project was unable to demonstrate sufficient economic savings or reliability benefits to merit approval on those grounds;
- (II) whether the resiliency benefits the transmission project would provide by reducing the impacts to customers of potential outages caused by regional extreme weather scenarios are sufficient to compensate for the project's inability to demonstrate sufficient economic savings or reliability benefits to merit approval on those grounds.
- (III) the cost effectiveness of the transmission project's ability to address the resiliency issue identified by ERCOT compared to other possible solutions,
- (IV) other factors listed in PURA §37.056(c), as appropriate.

(B) **Routing:** An application for a new transmission line must address the criteria in PURA §37.056(c) and considering those criteria, engineering

constraints, and costs, the line must be routed to the extent reasonable to moderate the impact on the affected community and landowners unless grid reliability and security dictate otherwise. The following factors must be considered in the selection of the utility's alternative routes unless a route is agreed to by the utility, the landowners whose property is crossed by the proposed line, and owners of land that contains a habitable structure within 300 feet of the centerline of a transmission project of 230 kV or less, or within 500 feet of the centerline of a transmission project greater than 230 kV, and otherwise conforms to the criteria in PURA §37.056(c):

- (i) whether the routes parallel or utilize existing compatible rights-of-way for electric facilities, including the use of vacant positions on existing multiple-circuit transmission lines;
  - (ii) whether the routes parallel or utilize other existing compatible rights-of-way, including roads, highways, railroads, or telephone utility rights-of-way;
  - (iii) whether the routes parallel property lines or other natural or cultural features; and
  - (iv) whether the routes conform with the policy of prudent avoidance.
- (C) **Uncontested transmission lines:** An application for a certificate for a transmission line will be approved administratively within 80 days from the date of filing a complete application if:
- (i) no motion to intervene has been filed or the application is

uncontested; and

- (ii) commission staff has determined that the application is complete and meets all applicable statutory criteria and filing requirements, including, but not limited to, the provision of proper notice of the application.

(D) **Projects deemed critical to reliability.** Applications for transmission lines which have been formally designated by a PURA §39.151 organization as critical to the reliability of the system will be considered by the commission on an expedited basis. The commission will render a decision approving or denying an application for a certificate under this subparagraph within 180 days of the date of filing a complete application for such a certificate unless good cause is shown for extending that period.

(E) **Grid reliability and resiliency assessment.** ERCOT must conduct a biennial assessment of the ERCOT power grid's reliability and resiliency in extreme weather scenarios. Each assessment must:

- (i) consider the impact of different levels of thermal and renewable generation availability;
- (ii) identify areas of the state that face significant grid reliability and resiliency issues, taking into account the impact of potential outages caused by regional extreme weather scenarios on customers, including multiple element outage analysis when appropriate, and
- (iii) recommend transmission projects that may increase the grid's

reliability or resiliency in extreme weather scenarios.

- (4) **Tie line.** An application for a tie line must include a study of the tie line by ERCOT. The study must include, at a minimum, an ERCOT-approved reliability assessment of the proposed tie line. If an independent system operator intends to conduct a study to evaluate a proposed tie line or intends to provide confidential information to another entity to permit the study of a proposed tie line, the independent system operator must file notice with the commission at least 45 days prior to the commencement of such a study or the provision of such information.
- (c) **Projects or activities not requiring a certificate.** A certificate, or certificate amendment, is not required for the following:
- (1) An extension of facilities as described in PURA §37.052(a) and (b);
  - (2) A new electric high voltage switching station, or substation;
  - (3) The repair or reconstruction of a transmission facility due to emergencies. The repair or reconstruction of a transmission facility due to emergencies should proceed without delay or prior approval of the commission and must be reported to the commission in accordance with §25.83 of this title;
  - (4) The construction or upgrading of distribution facilities within the electric utility's service area;
  - (5) Routine activities associated with transmission facilities that are conducted by transmission service providers. Nothing contained in the following subparagraphs should be construed as a limitation of the commission's authority as set forth in PURA. Any activity described in the following subparagraphs must be reported to

the commission in accordance with §25.83 of this title. The commission may require additional facts or call a public hearing thereon to determine whether a certificate of convenience and necessity is required. Routine activities are defined as follows:

(A) The modification, construction, or extension of a transmission line that connects existing transmission facilities to a substation or metering point provided that:

(i) the transmission line modification, construction, or extension does not exceed:

(I) three miles if the line connects to a load-serving substation or metering point; or

(II) two miles if the line connects to a generation substation or metering point; and

(ii) all rights-of-way necessary for the modification, construction, or extension have been acquired, and

(iii) all landowners whose property is directly affected by the transmission line, as defined in §22.52(a)(3) of this title, have given written consent for the modification, construction, or extension. If the transmission line modification, construction, or extension does not exceed one mile to provide service to a substation or metering point, written consent is only required by landowners whose property is crossed by the transmission line.

(B) The rebuilding, replacement, or respacing of structures along an existing

route of the transmission line; upgrading to a higher voltage not greater than 230 kV; bundling of conductors or reconductoring of an existing transmission facility, provided that:

- (i) no additional right-of-way is required; or
- (ii) if additional right-of-way is required, all landowners of property crossed by the electric facilities have given prior written consent.

(C) The installation, on an existing transmission line, of an additional circuit not previously certificated, provided that:

- (i) the additional circuit is not greater than 230 kV; and
- (ii) all landowners whose property is crossed by the transmission facilities have given prior written consent.

(D) The relocation of all or part of an existing transmission facility due to a request for relocation, provided that:

- (i) the relocation is to be done at the expense of the requesting party;  
and
- (ii) the relocation is solely on a right-of-way provided by the requesting party.

(E) The relocation or alteration of all or part of an existing transmission facility to avoid or eliminate existing or impending encroachments, provided that all landowners of property crossed by the electric facilities have given prior written consent.

(F) The relocation, alteration, or reconstruction of a transmission facility due to

the requirements of any federal, state, county, or municipal governmental body or agency for purposes including, but not limited to, highway transportation, airport construction, public safety, or air and water quality, provided that:

- (i) all landowners of property crossed by the electric facilities have given prior written consent; and
    - (ii) the relocation, alteration, or reconstruction is responsive to the governmental request.
  - (6) Upgrades to an existing transmission line by an MPE that do not require any additional land, right-of-way, easement, or other property not owned by the MOU;
  - (7) The construction, installation, or extension of a transmission facility by an MPE that is entirely located not more than 10 miles outside of an MOU's certificated service area that occurs before September 1, 2021; or
  - (8) A transmission facility by an MOU placed in service after September 1, 2015, that is developed to interconnect a new natural gas generation facility to the ERCOT transmission grid and for which, on or before January 1, 2015, an MOU was contractually obligated to purchase at least 190 megawatts of capacity.
- (d) **Standards of construction and operation.** In determining standard practice, the commission will be guided by the provisions of the American National Standards Institute, Incorporated, the National Electrical Safety Code, and such other codes and standards that are generally accepted by the industry, except as modified by this commission or by municipal regulations within their jurisdiction. Each electric utility must construct, install,



operate, and maintain its plant, structures, equipment, and lines in accordance with these standards, and in such manner to best accommodate the public, and to prevent interference with service furnished by other public utilities insofar as practical.

- (1) The standards of construction apply to, but are not limited to, the construction of any new electric transmission facilities, rebuilding, upgrading, or relocation of existing electric transmission facilities.
- (2) For electric transmission line construction requiring the acquisition of new rights-of-way, an electric utility must include in the easement agreement, at a minimum, a provision prohibiting the new construction of any above-ground structures within the right-of-way. For this purpose, new construction of above-ground structures does not include necessary repairs to existing structures, farm or livestock facilities, storage barns, hunting structures, small personal storage sheds, or similar structures. A utility may negotiate appropriate exceptions in instances where the electric utility is subject to a restrictive agreement being granted by a governmental agency or within the constraints of an industrial site. Any exception to this paragraph must meet all applicable requirements of the National Electrical Safety Code.
- (3) Measures must be applied when appropriate to mitigate the adverse impacts of the construction of any new electric transmission facilities, and the rebuilding, upgrading, or relocation of existing electric transmission facilities. Mitigation measures must be adapted to the specifics of each project and may include such requirements as:
  - (A) selective clearing of the right-of-way to minimize the amount of flora and

fauna disturbed;

- (B) implementation of erosion control measures;
- (C) reclamation of construction sites with native species of grasses, forbs, and shrubs; and
- (D) returning site to its original contours and grades.

(e) **Certificates of convenience and necessity for existing service areas and facilities.** For purposes of granting these certificates for those facilities and areas in which an electric utility was providing service on September 1, 1975, or was actively engaged in the construction, installation, extension, improvement of, or addition to any facility actually used or to be used in providing electric utility service on September 1, 1975, unless found by the commission to be otherwise, the following provisions prevail for certification purposes:

- (1) The electrical generation facilities and service area boundary of an electric utility having such facilities in place or being actively engaged in the construction, installation, extension, improvement of, or addition to such facilities or the electric utility's system as of September 1, 1975, must be limited, unless otherwise provided, to the facilities and real property on which the facilities were actually located, used, or dedicated as of September 1, 1975.
- (2) The transmission facilities and service area boundary of an electric utility having such facilities in place or being actively engaged in the construction, installation, extension, improvement of, or addition to such facilities or the electric utility's system as of September 1, 1975, must be, unless otherwise provided, the facilities

and a corridor extending 100 feet on either side of said transmission facilities in place, used or dedicated as of September 1, 1975.

- (3) The facilities and service area boundary for the following types of electric utilities providing distribution or collection service to any area, or actively engaged in the construction, installation, extension, improvement of, or addition to such facilities or the electric utility's system as of September 1, 1975, must be limited, unless otherwise found by the commission, to the facilities and the area which lie within 200 feet of any point along a distribution line, which is specifically deemed to include service drop lines, for electrical utilities.

- (f) **Transferability of certificates.** Any certificate granted under this section is not transferable without approval of the commission and remains in force until further order of the commission.
- (g) **Certification forms.** All applications for certificates of convenience and necessity must be filed on commission-prescribed forms so that the granting of certificates, both contested and uncontested, may be expedited. Forms may be obtained from Central Records.
- (h) **Commission authority.** Nothing in this section is intended to limit the commission's authority to recommend or direct the construction of transmission under PURA §§35.005, 36.008, or 39.203(e).

This agency certifies that the adoption has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority. It is therefore ordered by the Public Utility Commission of Texas that §25.101, Certification Criteria is hereby adopted with changes to the text as proposed.

Signed at Austin, Texas the 7<sup>th</sup> <sup>December</sup> day of ~~NOVEMBER~~ 2022.

**PUBLIC UTILITY COMMISSION OF TEXAS**



**PETER LAKE, CHAIRMAN**



**WILL MCADAMS, COMMISSIONER**



**LORI COBOS, COMMISSIONER**



**JIMMY GLOTFELT, COMMISSIONER**



**KATHLEEN JACKSON, COMMISSIONER**